Docket No.: 616292000111
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

| | |
|---|---|
| In re Patent Application of:<br>David Charles BAULCOMBE et al. | |
| Application No.: 10/805,804 | Confirmation No.: 9959 |
| Filed: March 22, 2004 | Art Unit: 1638 |
| For: GENE SILENCING | Examiner: Ashwin D. Mehta, Ph.D. |

**DISCLOSURE OF ASSERTION OF INVENTORSHIP**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants wish to notify the Office that Lionel Scott, the former Patent Manager of the assignee, has asserted inventorship in the present application to the extent that claims may be interpreted to read on silencing genes in "diagnostic or therapeutic" contexts in other than in plants and nematodes. The documents in applicants' possession related to this assertion are as follows:

Exh. 1. A letter from Lionel Scott to the undersigned sent by e-mail on 13 December 2007.

Exh. 2. E-mail correspondence from Mr. Scott urging a response to the letter.

Exh. 3. A letter sent by the undersigned to Mr. Scott by e-mail on 4 March 2008 along with its attachments.

Exh. 4. A follow-up letter to Mr. Scott sent 7 March 2008 by e-mail.

The undersigned has spoken twice with Mr. Scott by telephone and Mr. Scott remains adamant that the inclusion of organisms other than plants and nematodes in the specification entitles him to co-inventorship on any claims that could be construed to cover gene silencing in these organisms. Applicants' position is that, as Patent Manager of the assignee, the inclusion of organisms in the application as stated in paragraph 9 of Exhibit 1, was in any event contemplated by the named inventors and was within the scope of the obligation of a patent professional or a person employed by the assignee charged with oversight of the patent preparation, filing and prosecution process and does not rise to the level of invention.

Two further points are noted. First, Exhibit 4 is not directly relevant to the inventorship issue; it is included because it has been made clear to the undersigned that Mr. Scott's claim to inventorship is, at least in part, motivated by a desire to participate in any proceeds that might be obtained by virtue of this technology.

Second, applicants note that MPEP § 2137.01(I) states that the party or parties executing an oath or declaration under 37 C.F.R. § 1.63 are presumed to be the inventors. Applicants note that the wording of the declaration submitted in this application states "I believe I am an original first and joint inventor..."

Applicants request a response as to whether, in light of the MPEP section just quoted, the declaration on file is sufficient to create the presumption that the named inventors are the only inventors in the case or whether an additional declaration refuting inventorship by Mr. Scott would be needed to establish this presumption.

This communication and these documents are submitted in all pending cases referenced in Mr. Scott's e-mail of 13 December 2007. It is noted that 11/390,519 is abandoned; the claims in

11/013,469 are restricted to plants. Mr. Scott does not reference 10/806,253 but this communication is filed in that case as well.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket No. 616292000111.

Respectfully submitted,

Dated: May 2, 2008

By: /Kate H. Murashige/
Kate H. Murashige
Registration No.: 29,959
MORRISON & FOERSTER LLP
12531 High Bluff Drive, Suite 100
San Diego, California 92130-2040
Telephone: (858) 720-5112
Facsimile: (858) 720-5125

**Exhibit 1**

**Murashige, Kate H.**

**From:** L SCOTT [lionelscott@btinternet.com]
**Sent:** December 13, 2007 12:57 PM
**To:** Murashige, Kate H.
**Subject:** Inventorship issues on Plant Bioscience cases
**Attachments:** 4241165263-Inventorship observations 13.DEC.07.doc

Dear Kate Murashige,

I think inventorship should be reviewed on certain of your cases, notably, on US patent application numbers: 11/390,519, 11/013,469, 11/013,531, 11/013,315, 11/013,316 and 10/805,804, all in the name of Plant Bioscience Ltd. and all claiming foreign priority from GB 9925459.1 filed on 27th October 1999. I attach a letter setting out the reasons why. I will send a copy of this letter to you by mail which will probably get to you in the New Year.

Yours sincerely,

Lionel Scott

**PRIVATE AND CONFIDENTIAL**

Lionel Scott
Rivercot
Lower Shiplake
Henley on Thames
Oxfordshire
RG9 3NU
ENGLAND

13th December 2007

FAO: Kate H. Murashige

Morrison and Foerster LLP
12531 High Bluff Drive
Suite 100
San Diego
CA 92130-2040
UNITED STATES OF AMERICA

Dear Kate,

**Re: Inventorship on US patent application nos.: 11/390,519, 11/013,469, 11/013,531, 11/013,315, 11/013,316 and 10/805,804, all in the name of Plant Bioscience Ltd. and all claiming foreign priority from GB 9925459.1 filed on 27th October 1999.**

I believe that the inventorship of the above patent applications where claims can be construed as reading onto the diagnosis or treatment of disease states whether in whole or in part in higher organisms, such as mammals, should be reviewed.

I provide the following points in support:

1. In 1999 I was the in house manager of the Plant Bioscience patent portfolio.

2. I was informed that the scientists had given a talk at a date earlier than the priority date and was asked to see if there was anything patentable that could be rescued in those countries where a grace period operated in the face of disclosures by the inventors.

3. I read the disclosures and it occurred to me that what the inventors had found in plants, namely, the existence of short RNA species could be of enormous practical importance in mammals and in particular in the treatment and/or diagnosis of diseases in which genes and their products ie RNA species are known to play a role, in eg cancerous disease and viral disease.

4. In the preparatory period leading up to the filing of October 1999, it was apparent that the two current inventors (Baulcombe and Hamilton) had not conceived of the above-mentioned possibilities and I spoke with Andrew Hamilton on the matter. I said that their research had quite possibly opened a "Pandora's Box" for a realistic nucleic acid-based treatment for cancerous and viral diseases, and diagnoses. At the time, both inventors were plant-centred in both their thinking and in their researches and had not conceived of the above possibilities.

5. A publication in the top-rated Science journal (Hamilton AJ, Baulcombe DC (1999) A species of small antisense RNA in post-transcriptional gene silencing in plants. *Science* **286**: 950-952) on the discovery of short RNAs did not mention therapeutic possibilities, nor did it allude to the possibilities open to genetic engineering using such short RNAs in a role relating to a therapeutic or diagnostic context in higher organisms.

6. In the construction of the priority filing, I ensured that what could be placed in that filing on the use of SRMS and/or SARMS in a therapeutic and/or diagnostic context was placed in the application. This was done to provide the applicant with some basis to claim elements of diagnosis or treatment using the technology.

7. When I left PBL, there was one application in place in the USA and this has subsequently been granted as US 6,753,139 and is limited to claims to: a method of detecting the silencing of a target gene in a plant, a method of identifying a silenced target gene in a plant in which gene silencing is detected, a process for isolating one or more RNA molecules associated with target gene silencing from a sample of material from a plant, and a process for isolating a silencing agent comprising SRMs for a target gene from a plant. The inventorship on this granted patent is correct and I make no suggestion that I should be nominated on the inventorship on this patent.

8. I discover now that there are a further six applications that all take priority from the GB case filed in October 1999, and these appear to me to include claims on which I ought to be nominated as an inventor as of right. Many of the claims clearly read onto *inter alia* methods of silencing target genes in organisms that are clearly dependent on the introduction of SRMs (which may be synthetic) into an organism (which may be a higher order one), such as a mammal. There would appear to be nothing in such claims to suggest that the gene silencing would not be performed outside of a therapeutic or diagnostic context.

9. I was the person that first recognised that the SRMS/SARMS technology could be used for the silencing of genes in higher organisms outside of plants and nematodes, in a therapeutic and/or a diagnostic context: the intellectual input for these aspects came from me.

I am sure that you will have comments and questions on the above, and I would be happy to answer any queries that you may have.

Yours sincerely,

Lionel Scott

**Exhibit 2**

**Murashige, Kate H.**

---

**From:** L SCOTT [lionelscott@btinternet.com]
**Sent:** March 02, 2008 4:28 AM
**To:** Murashige, Kate H.
**Subject:** PBL Inventorship Matter

Hi Kate,

Any progress, yet? I hope so because it does not take almost 3 months to settle an inventorship error. At least, not in my lengthy experience. But I do understand that your being on the other side of the Pond would introduced some hindering time into things....

Anyway, please let me know if any progress has been made and if not, why not.

Thanking you in anticipation of your reply.

Regards,

Lionel Scott

**Murashige, Kate H.**

**From:** L SCOTT [lionelscott@btinternet.com]
**Sent:** February 12, 2008 11:33 PM
**To:** Murashige, Kate H.
**Subject:** RE: PBL inventorship issues

Dear Kate,

Thank you for your quick reply.

I can be contacted on +44 1189 404285. This number is what we call ex-directory over here and I ask you not to give it out to anyone.

I am in most evenings which means you can ring me in your normal office hours.

Lionel Scott

*"Murashige, Kate H." <KMurashige@mofo.com>* wrote:

> thank you for your email and I apologize for this. I have discussed this with the assignee and they asked me to contact you about it. this was about 2 weeks ago and I have just been sidetracked with deadlines. Could you let me know when and at what number I can reach you later this week or early next?
>
> ---
>
> **From:** L SCOTT [mailto:lionelscott@btinternet.com]
> **Sent:** February 12, 2008 12:39 PM
> **To:** Murashige, Kate H.
> **Subject:** PBL inventorship issues
>
> Dear Kate,
>
> I write further to my email of 13 December 2007 and my recent letter sent by airmail on 21 January 2008 providing a signed copy of the attachment to that email.
>
> It is now coming up to 2 months since my first communication and I am wondering if there has been any movement on this inventorship issue? Please let me know something by return.
>
> I am contemplating writing to the USPTO saying that there is an inventorship issue to consider although I expect that the USPTO will probably do nothing other than alert the assignee of the fact that correspondence on the matter is on the public file. I will await a response from you before making a decision on taking further action.
>
> For your information, the assignee should be fully aware of the potential for an inventorship issue to arise since it arose in 2000 when I was employed at PBL and an opinion was provided on the subject by Mewburn Ellis, but I was not provided with a copy of the opinion for comment at the time.
>
> Yours sincerely,

**Exhibit 3**

**Sarda, Germaine S.**

**From:** Sarda, Germaine S.
**Sent:** Tuesday, March 04, 2008 10:32 AM
**To:** 'lionelscott@btinternet.com'
**Cc:** 'Gerard Bencen'; Murashige, Kate H.
**Subject:** Our Reference: 61629-20001.30

**Attachments:** SFX2AC1.pdf

Re: Inventorship Issues Raised
Our Reference: 61629-20001.30

Dear Dr. Scott,

Attached please find a letter from Kate Murashige along with copies of related documents for the above-referenced matter.

Please let me know if I may be of further assistance to you.

Best regards,

Germaine Sarda
Legal Secretary
Morrison & Foerster LLP
12531 High Bluff Drive, Suite 100
San Diego, CA 92130-2040
Tel (858) 720-7978

SFX2AC1.pdf (2 MB)

MORRISON | FOERSTER

12531 HIGH BLUFF DRIVE
SUITE 100
SAN DIEGO, CALIFORNIA
92130-2040

TELEPHONE: 858.720.5100
FACSIMILE: 858.720.5125

WWW.MOFO.COM

MORRISON & FOERSTER LLP
NEW YORK, SAN FRANCISCO, LOS ANGELES, PALO ALTO, SAN DIEGO, WASHINGTON, D.C.
NORTHERN VIRGINIA, ORANGE COUNTY, DENVER, SACRAMENTO, WALNUT CREEK
TOKYO, LONDON, BEIJING, SHANGHAI, HONG KONG, SINGAPORE, BRUSSELS

March 3, 2008

Writer's Direct Contact
858.720.5112
KMurashige@mofo.com

Dr. Lionel Scott
Rivercot
Lower Shiplake
Henley on Thames
Oxfordshire
RG9 3NU
England

Re: Inventorship Issues Raised
Our Reference: 61629-20001.30

Dear Dr. Scott:

Thank you for the telephone conversation on March 3rd and the reiteration of the point raised in your letter to me dated 13 December 2007 in which you state that the listed inventors on the above-referenced patent applications did not understand that the short RNA molecules (SRMs) found in plants could suggest a manner of using corresponding SRMs could be used in a therapeutic or diagnostic context in non-plant systems.

In the course of our conversation, I agreed to send several documents to you for your review. These are as follows:

1. The opinion letter provided by Mewburn Ellis concluding that you would not properly be included as a co-inventor with respect to claims appended to the opinion, which are directed to methods of silencing target gene.

2. A copy of the decision in *Solomon v. Kimberly-Clark Corp.*, 216 F3d 1372, 55 USPQ2d 1279 (Fed. Cir. 2000). The pertinent paragraph is the last full paragraph in the decision which states that:

> An attorneys' professional responsibility is to assist his or her client in defining her invention to obtain, if possible, a valid patent with maximum coverage. An attorney performing that role should not be a competitor of the client, asserting inventorship as a result of representing his client.

3. A copy of the rule cited in this paragraph, 37 C.F.R. § 10.64.

4. A copy of what was forwarded to me as representing your employment contract with Plant Bioscience Limited (PBL).

5. A copy of section 39 of the Patents Act as provided to me by PBL's outside counsel.

I understand your position that you are not the patent attorney who actually drafted the patent application. However, according to your letter, you apparently instructed the attorney in this regard, and were serving at the time as a patent manager for PBL, the assignee. I am not sure I understood your point about the named inventors not being employees of PBL at the time the invention was made; it appears that an assignment was, in any event, made to PBL.

I can assure you that there is no attempt here to "cut you out" of something to which you are entitled. We are trying to exert our best efforts to make sure that the inventorship is correct as that is, indeed, a requirement of U.S. law. We believe that if there was indeed a contribution that you made to the application as delineated in your letter, that contribution is valuable, but within your professional responsibility as patent manager at PBL, and thus is not properly regarded as making you a co-inventor.

I look forward to receiving the transcript of the interview with one of the inventors to which you refer.

Please do consider these documents. I will revert to you in due course. Ideally, we would like to have you acknowledge in writing that under the facts here, you should not be designated a co-inventor.

Best regards and thanks for your consideration,

Kate

Kate H. Murashige

KHM:cs
Enclosures
cc: Gerard Bencen M.S., J.D. (via e-mail; w/encls.)

MEWBURN ELLIS

RECEIVED
-5 FEB 2004
Plant Bioscience Ltd

Dr Jan Chojecki
Plant Bioscience Limited
Norwich Research Park
Colney Lane
NORWICH
Norfolk NR4 7UH

4 February 2004

Dear Jan

**General Matters**
**Our Ref: SMW/LG9506056**

As requested, I enclose my opinion relating to inventorship of the claims proposed for filing in a US divisional application relating to the gene silencing technology described in your US application 09/491,549.

Do please contact me with any questions.

Yours sincerely

Seán M Walton
MEWBURN ELLIS

Enc: Copy Opinion
Draft SRNA Intervention Claims

CC: Simon Kremer, Mewburn Ellis

SMW/jeg

**PRIVILEGED AND CONFIDENTIAL MEMORANDUM**

**Mewburn Ellis reference SMW/LG 9506056**
**PBL reference 99.190**

*Inventorship for Post-Transcriptional Gene Silencing Claims*

Background

Plant Bioscience Limited (PBL) is the owner of US patent application 09/491549 relating to short RNAs (SRMs) and post-transcriptional gene silencing (PTGS). The named inventors are David Baulcombe and Andrew Hamilton.

PBL has recently instructed filing of a divisional application in the USA relating to certain aspects of the subject-matter described in the existing application. The proposed claims for this divisional application are annexed to this memorandum. They relate to use of short RNA molecules for effecting post-transcriptional gene silencing in an organism.

I was asked by PBL to review the inventorship for the divisional application, in the light of a suggestion from Lionel Scott that he might be considered a co-inventor of some subject-matter described in the original application. At the time that Lionel Scott made the suggestion a set of claims proposed for the divisional application had not been finalised. Now that such a set has been prepared I provide my opinion on inventorship of the subject-matter as defined in the proposed claims.

Opinion

In my opinion, the inventors for the subject-matter defined in the claims proposed for the planned divisional application are David Baulcombe and Andrew Hamilton.

I have arrived at this opinion following discussions with David Baulcombe and Lionel Scott at meetings and Andrew Hamilton on the telephone. All three provided their comments following review of available contemporaneous documentation.

I have additionally taken into account the content of the following documents:

Overheads from talk given by one of the inventors on 27 February 1999 at EMBO workshop on "Post-transcriptional regulation of gene expression in plants"; February 25 - 28, 1999, conducted at Leysin, in Switzerland.

Poster given at meeting: Molecular Plant Microbe Interactions (MPMI), 9th International Congress, July 25 - 30, 1999, which I am told would have gone up on the night of the 24th or the morning of the 25th July.

Hamilton and Baulcombe *Science* 29 October 1999 Vol. 286, pages 950-952.

**PRIVILEGED AND CONFIDENTIAL**

The invention of David Baulcombe and Andrew Hamilton is based on their experimental work and scientific insight and ideas which they developed over a period of time. It is clear to me from my discussions with these inventors and from the scientific publications that they authored, as noted above, that they were in possession at an early stage of knowledge and belief that the short RNAs that they had found experimentally are effectors of PTGS in a variety of organisms. This is evident for example from the slides of the talk given on 27 February 1999. This predated any discussion between the inventors and Lionel Scott.

Lionel Scott, in his capacity as manager of intellectual property at PBL, assisted the inventors and patent attorney (Simon Kremer at Mewburn Ellis) in formulating the patent applications that were filed on 27 October 1999 and 26 January 2000. In this context, he had various discussion with the inventors and patent attorney, but he is not in my view an inventor of any of the claims proposed for filing in the planned divisional application.

Seán Walton
MEWBURN ELLIS

4 February 2004

*Draft SRNA intervention claims 6 January 2004*

1 A method of silencing a target gene in an organism by post-transcriptional gene silencing (PTGS),
the method comprising the step of introducing into the organism a silencing agent which targets a target region of said target gene,
wherein the silencing agent comprises short RNA molecules (SRMs) which are 25 nucleotides plus or minus 1, 2, 3, 4 or 5 nucleotides in length, and which are specific for the target region of the target gene.

2 A method in accordance with claim 1 wherein the SRMs are short anti-sense RNA molecules (SARMs) and short sense RNA molecules (SSRMs).

3 A method in accordance with claim 1 wherein the SRMs are short anti-sense RNA molecules.

4 A method in accordance with claim 1 wherein the SRMs are short sense RNA molecules.

5 A method of silencing a target gene in an organism, which method comprises:
(a) providing a DNA construct in which a promoter is operably linked to DNA for transcription in a host cell to generate a silencing agent for a target gene,
wherein the silencing agent comprises one or more short RNA molecules (SRMs) which are 25 nucleotides plus or minus 1, 2, 3, 4 or 5 nucleotides in length, and which are specific for the target region of the target gene,
(b) introducing said construct into the organism, such that the target gene in the organism is silenced by the silencing agent encoded by said construct.

6 A host cell containing a construct according to claim 5.

7 A method of selecting a target region of a target gene, which gene it is desired to silence, which method comprises the steps of:
(I) isolating one or more RNA molecules from a sample of material, wherein the RNA molecules are SRMs which are 25 nucleotides plus or minus 1, 2, 3, 4 or 5 nucleotides in length, and which are specific for the target region of the target gene, by
(a) producing a nucleic acid extract from said sample,
(b) purifying said extract to produce purified RNA molecules by carrying out at least one purification step selected from the following steps (i) filtration; (ii) differential precipitation (iii) ion exchange chromatography.
to isolate said SRMs which are a silencing agent for said target gene,
(II) identifying a target region in the sequence of said target gene which corresponds to a sequence of said SRMs.

8 A process according to claim 7 which further comprises the step of separation the purified RNA molecules according to size by electrophoresis through a gel, which gel is a 15% polyacrylamide gel containing 7M urea as a denaturant and TBE (0.5x) as a buffer.

9 A process according to claim 8 which further comprises the step of transferring the RNA molecules on the gel to a hybridisation

membrane by electrophoresis.

10 A process according to claim 9 which further comprises the step of labelling RNA molecules on the hybridisation membrane using a radioactive probe obtained from a single stranded RNA molecule transcribed *in vitro* from a plasmid DNA templates.

11 A method of silencing a target gene in an organism, which method comprises the steps of:
(i) performing a process in accordance with claim 7 to select a target region of the target gene,
(ii) silencing said target gene in said organism by targeting said target region of said target gene with a silencing agent.

12 A method in accordance with claim 7 wherein step (ii) is achieved by the introduction into the organism of SRMs appropriate for the target region of the target gene in order to induce silencing of said target gene.

13 A method of silencing a target gene in a first organism, which method comprises the steps of:
(i) generating in a second organism, SRMs which are a silencing agent for said target gene, wherein the SRMs are 25 nucleotides plus or minus 1, 2, 3, 4 or 5 nucleotides in length, and which are specific for the target region of the target gene,
(ii) introducing said SRMs into said first organism such as to silence said target gene therein.

14 A method according to claim 13 wherein the target gene is endogenous in the first organism but is not an endogenous gene in the second organism.

olomon v. Kimberly-Clark Corp.



**tesults for:** CASECITE(55 USPQ 2d 1279)

ISPQ, 2d Series (1986 - Present) > U.S. Court of Appeals, Federal Circuit > Solomon v. imberly-Clark Corp., 55 USPQ2d 1279 (Fed. Cir. 2000)

**55 USPQ2d 1279**

**Solomon v. Kimberly-Clark Corp.**

**U.S. Court of Appeals Federal Circuit**

No. 00-1033

Decided June 30, 2000

216 F3d 1372

## Headnotes

### PATENTS

[1] **Patentability/Validity -- Specification -- Claim adequacy** (• 115.1109)

Federal district court erred by comparing claims at issue with inventor's deposition testimony in holding claims invalid under second paragraph of 35 U.S.C. Section 112, since court, in evaluating claim under either "definiteness" or "which the applicant regards as his invention" portion of that paragraph, must limit its inquiry to way one of ordinary skill in art would interpret claims in view of written description portion of specification, since inventor testimony obtained in context of litigation is of little probative value in assessing validity under Section 112, second paragraph, especially in view of fact that determination of whether claim complies with that paragraph is drawn from court's performance of its duty as construer of claims, and since, once patent issues, claims and written description must be viewed objectively, from perspective of person of skill in art.

[2] **Patentability/Validity -- Inventorship** (• 115.13)

Infringement defendant failed to prove by clear and convincing evidence that asserted claims of patent in suit are invalid under 35 U.S.C. Section 102(f) for failure to name true inventor, since defendant relied entirely on inventor's lack of precision in defining her invention in course of deposition, rather than introducing evidence that someone else was true inventor, and since, despite some vagueness and inconsistency in her deposition testimony, inventor maintained throughout litigation that she invented claimed subject matter, and submitted evidence that prototype in her patent attorney's files embodied claimed invention.

## Particular Patents

### Particular patents -- General and mechanical -- Disposable underwear

4,560,381, Southwell, disposable panty for menstrual wear, summary judgment of invalidity *reversed*.

## Case History and Disposition

**Page 1279**

Appeal from the U.S. District Court for the District of Arizona, Broomfield, C.J.

Action by Sandra Solomon against Kimberly-Clark Corp. for patent infringement. Plaintiff appeals from summary judgment of invalidity on ground of indefiniteness. Reversed.

## Attorneys

Jeffrey L. Weiss and Harry M. Weiss, of Harry M. Weiss & Associates, Scottsdale, Ariz., for plaintiff-appellant.

William H. Baumgartner Jr., of Sidley & Austin, Chicago, Ill.; V. Bryan Medlock Jr., of Sidley & Austin, Dallas, Texas; Joseph S. Miller and Carter G. Phillips, of Sidley & Austin, Washington, D.C.; Harry M. Beggs, of Carson Messinger, Phoenix, Ariz., for defendant-appellee.

## Judge

Before Lourie, Clevenger, and Bryson, circuit judges.

# Opinion Text

## Opinion By:

Lourie, J.

Sandra Solomon appeals from the decision of the United States District Court for the District of Arizona granting Kimberly- Clark Corporation's motion for summary judgment that the claims of U.S. Patent 4,560,381 are invalid as indefinite under 35 U.S.C. Section 112, Para. 2. *See Solomon v. Kimberly- Clark Corp.* , No. CIV 96-2000 PHX RCB (D. Ariz. Sept. 2, 1999) (" *Solomon II* "). Because the district court erred in holding the claims invalid under that provision of the statute, we reverse.

## BACKGROUND

## A. *The Claimed Invention*

Sandra Southwell (now Sandra Solomon) is the named inventor on the '381 patent,

**Page 1280**

which is directed to disposable panties and panty liners for use during a woman's menstrual cycle. Independent claim 1, which is representative of the claims at issue, reads as follows:

> 1. A disposable woman's protective menstrual panty for holding a feminine napkin comprising: a relatively thick layer of disposable absorbent material; and a depression means in said relatively thick layer of disposable absorbent material, said depression means including a substantially thinner layer of disposable absorbent material operably disposed longitudially [sic] in the crotch area of said panty and extending at least partially upward thereof in both front and rear areas, said depression means being dimensioned for receiving said feminine napkin therein for positioning same during use.

'381 patent, col. 17, l. 65 to col. 18, l. 9. Figures 1 and 2 of the '381 patent, which have been *modified* for clarity, depict the preferred embodiment of the claimed invention in the following manner:

As illustrated by the figures, panty 21 is divided into body portion 22, waist portion 23, crotch portion 24, and leg portions 25. *See id.* at col. 5, ll. 58-60. Body portion 22 is itself divided at division line 28 into top portion 26 and bottom portion 27. *See id.* at col. 5, ll. 60-62. Top portion 26 is preferably made of lightweight open mesh-type material or fabric, and the outer surface of bottom portion 27 may be made of the same or different material, *e.g.* , a woven, hydrophobic material. *See id.* at col. 5, l. 62 to col. 6, l. 27. The inner surface of bottom portion 27, however, is composed of a highly absorbent, thick layer 51. *See id.* at col. 6, ll. 37-43. Crotch portion 24 of lower portion 27 contains an elongated, oval-shaped depression 43 that is bounded on both sides by thick layer 51 (specifically labeled 44 in the crotch region) and contains a relatively thin layer of absorbent material at its base. *See id.* at col. 7, ll. 40-65. The depression functions to receive and to hold a commercially available feminine napkin or pad. *See id.* at col. 8, ll. 48-60.

## B. *Procedural History*

Solomon sued Kimberly-Clark, alleging that its Personals(Registered) panty infringed all fifty-nine claims of the '381 patent. [1] The district court granted Kimberly-Clark's motion for summary judgment of noninfringement, holding that the Personals(Registered) panty did not infringe the claims of the patent either literally or under the doctrine of equivalents. On appeal, we upheld the district court's claim construction, as well as its conclusion that there was no genuine issue of material fact that the accused panties did not literally infringe. *See Solomon v. Kimberly-Clark Corp.* , No. 97-1571, 1998 WL 279346, at *2-*5 (Fed.Cir. May 26, 1998) (" *Solomon I* "). However, we vacated the judgment and *remanded* for further proceedings in view of our conclusion that genuine issues of material fact existed regarding infringement under the doctrine of equivalents. *See id.* at *4-*7.

[1] Because the details of Kimberly-Clark's product are not relevant to the issues presented on appeal, we do not discuss them here.

On remand, Kimberly-Clark again moved for summary judgment, alleging that the patent was invalid under 35 U.S.C.

**Page 1281**

Section 102(f) [2] because Solomon was not the true inventor of the claimed invention, or alternatively under 35 U.S.C. 112, Para. 2, [3] because Solomon failed to claim the subject matter that she regarded as her invention. *See Solomon II* , slip op. at 4. Kimberly-Clark based its allegations in part on Solomon's deposition testimony, in which she allegedly stated on several occasions that the depression limitation in the claimed invention was made of material having a uniform, rather than varying, thickness. *See id.* at 3. Kimberly-Clark contended that those statements were contrary to what was claimed in the patent, apparently based on our (and the district court's) construction of "depression" to mean a portion of the panty "formed by surrounding a region of substantially thinner material with a region of thicker material." *Solomon I* , 1998 WL 279346, at *2. Kimberly-Clark also based its arguments on Solomon's DX13 prototype of the claimed invention, which depicts an area of uniform thickness in the region where the depression is located. *See Solomon II* , slip op. at 3-4.

[2] Section 102(f) provides that:

> A person shall be entitled to a patent unless--
>
> * * * (f) he did not himself invent the subject matter sought to be patented . . . .

U.S.C. Section 102(f) (1994).

[3] Section 112, Para. 2, provides that:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

U.S.C. Section 112, Para. 2 (1994).

The district court held that Kimberly- Clark had not proven that the claims of the patent were invalid under section 102(f), because Kimberly-Clark failed to name the "true inventor" on the patent. *See id.* at 9-10. The court reasoned that even if it were legally correct to invalidate patent claims under section 102(f) in the absence of proof of the identity of the true inventor, Kimberly-Clark had nonetheless failed to prove by clear and convincing evidence that Solomon was not the true inventor. *See id.* The district court concluded, however, that Solomon's deposition testimony revealed that "her patent does not accurately depict her invention" and thus held that there was no genuine issue of material fact that the patent was invalid under section 112, paragraph 2, for failure to claim "the subject matter which the applicant regards as his invention." *Id.* at 13-14. While acknowledging that this case did not involve a "typical" validity challenge under section 112, paragraph 2, the district court noted that it could "see little reason to ignore the mandate of Section 112 in such a case." *Id.* at 14. The court also held that Solomon's affidavit attesting to her inventorship was insufficient to prevent summary judgment on that issue. *See id.* at 14-16.

Solomon appealed the district court's invalidity ruling to this court. We have jurisdiction pursuant to 28 U.S.C. Section 1295(a)(1) (1994).

## DISCUSSION

### A. *Standard of Review*

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c). "The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby, Inc.* , 477 U.S. 242, 255 (1986). We review the grant of a motion for summary judgment *de novo* , reapplying the summary judgment standard. *See Kemco Sales, Inc. v. Control Papers Co.* , 208 F.3d 1352, 1359, 54 USPQ2d 1308, 1312 (Fed.Cir. 2000).

The determination whether a claim recites "the subject matter which the applicant regards as his invention," like a determination whether a claim is sufficiently definite, "is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *See Personalized Media Communications, LLC v. ITC* , 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed.Cir. 1998) (setting forth this reasoning in the context of definiteness). Thus, as with claim construction, a determination under either portion of section 112, paragraph 2, is a question of law that we review *de novo* . *See Atmel Corp. v. Information Storage Devices, Inc.* , 198 F.3d 1374, 1378, 53 USPQ2d 1225, 1227 (Fed.Cir. 1999) (setting forth this standard in the context of definiteness).

### B. *Invalidity under Section 112, Paragraph 2*

Solomon argues that the district court erred in invalidating the claims of the '381 patent under section 112, paragraph 2, asserting that a court evaluates compliance with that provision by comparing the claims to the disclosure in the specification, not by

**Page 1282**

comparing the claims to an inventor's deposition testimony. Solomon alternatively contends that even if the testimony and other evidence are considered, Kimberly-Clark has still failed to prove invalidity by clear and convincing evidence. Solomon also asserts that Kimberly-Clark's evidence and arguments really relate to inventorship, not definiteness, and such a challenge should have been raised under section 102(f). Kimberly-Clark responds that the language of section 112, paragraph 2, plainly states that patent claims must specify what "the applicant regards as his invention," and that therefore claims may be invalid if inventor testimony conflicts with the recitations of the claims. Kimberly-Clark further contends that based on the evidence it presented, it did succeed in proving that the claims of the '381 patent are invalid under section 112, paragraph 2.

**[ 1 ]** We agree with Solomon that the district court erred in invalidating the claims of the '381 patent under section 112, paragraph 2, based on Solomon's deposition testimony. As an initial matter, we note that for a claim to comply with section 112, paragraph 2, it must satisfy two requirements: first, it must set forth what "the applicant regards as his invention," and second, it must do so with sufficient particularity and distinctness, *i.e.* , the claim must be sufficiently "definite." *See* 35 U.S.C. Section 112, Para. 2; *see also* Irah H. Donner, *Patent Prosecution* ch. 9.VIII, at 933 (2d ed. 1999).

During the prosecution of a patent application, a claim's compliance with both portions of section 112, paragraph 2, may be analyzed by consideration of evidence beyond the patent specification, including an inventor's statements to the Patent and Trademark Office ("PTO"). *See In re Conley* , 490 F.2d 972, 976, 180 USPQ 454, 456-57 (CCPA 1974) (noting that the phrase "which the applicant regards as his invention" in the second portion of section 112, paragraph 2, "has been relied upon in cases where some material submitted by applicant, *other than his specification* , shows that a claim does not correspond in scope with what *he regards* as his invention."); *In re Moore* , 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971) (" [T]he definiteness of the language employed must be analyzed--not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.").

It is not inappropriate for the PTO or a reviewing tribunal to consider such evidence extrinsic to the patent application in light of the goals of the examination process and the fact that pending claims can be freely amended to comport with those goals. As we explained in *In re Zletz* :

> During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. When the applicant states the meaning that the claim terms are intended to have, the claims are examined with that meaning, in order to achieve a complete exploration of the applicant's invention and its relation to the prior art. The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.

*In re Zletz* , 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed.Cir. 1989) (citation omitted); *see In re Prater* , 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Thus, in the more fluid environment of patent examination, an inventor's statements are relevant to determining compliance with the statute.

On the other hand, when a court analyzes whether *issued claims* comply with section 112, paragraph 2, the evidence considered in that analysis should be more limited. As for the "definiteness" portion of section 112, paragraph 2, our precedent is well-settled that a court will typically limit its inquiry to the way one of skill in the art would interpret the claims in view of the written description portion of the specification. As we stated in *Personalized Media* :

> Determining whether a claim is definite requires an analysis of whether one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, Section 112 demands no more.

*Personalized Media* , 161 F.3d at 705, 48 USPQ2d at 1888 (internal quotation marks omitted); *see Atmel* , 198 F.3d at 1378, 53 USPQ2d at 1227-28 ("As a general matter, it is well-established that the determination whether a claim is invalid as indefinite depends on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the specification." (internal quotation marks omitted)). [4] Although

**Page 1283**

we have not specifically addressed the types of evidence that may be considered in analyzing whether a claim complies with the "which the applicant regards as his invention" portion of that statute, we see no reason for a different standard to apply, as the rationale for reviewing a limited range of evidence under either portion of the statute is the same.

---

[4] *See also , e.g. , Beachcombers v. Wildewood Creative Prods., Inc.* , 31 F.3d 1154, 1158, 31 USPQ2d 1653, 1656 (Fed.Cir. 1994); *North Am. Vaccine, Inc. v. American Cyanamid Co.* , 7 F.3d 1571, 1579, 28 USPQ2d 1333, 1339 (Fed.Cir. 1993); *Morton Int'l, Inc. v. Cardinal Chem. Co.* , 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1194-95 (Fed.Cir. 1993); *Miles Lab., Inc. v. Shandon Inc.* , 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir. 1993); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.* , 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed.Cir. 1986). Despite this general rule, in some circumstances evidence beyond the claims and written description may be reviewed. *See e.g. , Amgen, Inc. v. Chugai Pharm. Co.* , 927 F.2d 1200, 1217-18, 18 USPQ2d 1016, 1030-31 (Fed.Cir. 1991); *Texas Instruments Inc. v. ITC* , 871 F.2d 1054, 1063, 10 USPQ2d 1257, 1263-64 (Fed.Cir. 1989). Moreover, we note that the determination of the perspective of one of skill in the art may involve reference to evidence extrinsic to the patent, such as prior art and witness testimony. *See Orthoki - netics* , 806 F.2d at 1576, 1 USPQ2d at 1088 (referencing witness testimony); *see generally* 3 Donald S. Chisum, *Chisum on Patents* Section 7.03 [2] (2000) (discussing the "person skilled in the art" standard).

---

A more limited range of evidence should be considered in evaluating validity as opposed to patentability under either portion of section 112, paragraph 2, because the language of issued claims is generally fixed (subject to the limited possibilities of reissue and reexamination), the claims are no longer construed as broadly as is reasonably possible, and what the patentee subjectively intended his claims to mean is largely irrelevant to the claim's objective meaning and scope, *see Markman v. Westview Instruments, Inc.* , 52 F.3d 967, 985-86, 34 USPQ2d 1321, 1334-35 (Fed.Cir. 1995) (*en banc*), aff'd , 517 U.S. 370, 38 USPQ2d 1461 (1996). As has been noted in the context of definiteness, the inquiry under section 112, paragraph 2, now focuses on whether the claims, as interpreted in view of the written description, adequately perform their function of notifying the public of the patentee's right to exclude.

*See United Carbon Co. v. Binney & Smith Co.* , 317 U.S. 228, 233, 55 USPQ 381, 384 (1942) ("To sustain claims so indefinite as not to give the notice required by the statute would be in direct contravention of the public interest which Congress therein recognized and sought to protect."); *see also* 3 Chisum, *supra* , Section 8.03, at 8-14. ("The primary purpose of this requirement of definiteness in claims is to provide clear warning to others as to what constitutes infringement of the patent.").

It is particularly inappropriate to consider inventor testimony obtained in the context of litigation in assessing validity under section 112, paragraph 2, in view of the absence of probative value of such testimony. In *Markman* , we addressed the closely related issue of litigation-derived inventor testimony in the context of claim construction, and concluded that such testimony is entitled to little, if any, probative value. *See Markman* , 52 F.3d at 985, 34 USPQ2d at 1332-33 (holding that inventor testimony as to " [t]he subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history)."); *see also Bell & Howell Document Management v. Altek Sys.* , 132 F.3d 701, 706, 45 USPQ2d 1033, 1038 (Fed.Cir. 1997) ("The testimony of an inventor and his attorney concerning claim construction is thus entitled to little or no consideration. The testimony of an inventor is often a self-serving, after-the-fact attempt to state what should have been part of his or her patent application. . . ."); *Roton Barrier, Inc. v. Stanley Works* , 79 F.3d 1112, 1126, 37 USPQ2d 1816, 1826 (Fed.Cir. 1996) ("We have previously stated that an inventor's after-the-fact testimony is of little weight compared to the clear import of the patent disclosure itself.") (internal quotation marks omitted); *cf. Voice Techs. Group, Inc. v. VMC Sys., Inc* ., 164 F.3d 605, 615-16, 49 USPQ2d 1333, 1340-41 (Fed.Cir. 1999) (acknowledging that "the inventor can not by later testimony change the invention and the claims from their meaning at the time the patent was drafted and granted" but stating that the inventor may provide testimony explaining the claimed invention and its development). We reasoned that an inventor is not competent to construe patent claims for the following reasons:

> [C]ommonly the claims are drafted by the inventor's patent solicitor and they may even be drafted by the patent examiner in an examiner's amendment (subject to the approval of the inventor's solicitor). While presumably the inventor has approved any changes to the claim scope that have occurred via amendment during the prosecution process, it is not unusual for there to be a significant difference between what an inventor thinks his patented invention is and what the ultimate scope of the claims is after allowance by the PTO.

*Markman* , 52 F.3d at 985, 34 USPQ2d at 1335 (citation omitted). We find this analysis equally compelling in the present context, as the determination whether a claim complies with section 112, paragraph 2, is "drawn from the court's performance of its duty as the construer of patent claims." *Personalized Media* , 161 F.3d at 705, 48 USPQ2d 1888 . Although we recognize that "which the applicant regards as his invention" is subjective language, *see* Donner, *supra* , ch. 9.VIII, at 933, once the patent issues, the claims and written description must be viewed objectively, from the standpoint of a person of skill in the art, *see Markman* , 52 F.3d at 986, 34 USPQ2d at 1335.

For the foregoing reasons, we conclude that inventor testimony, obtained in the context of litigation, should not be used to invalidate issued claims under section 112, paragraph 2. [5] Accordingly, we agree with Solomon that the district court erred in using her deposition testimony to invalidate the claims of the '381 patent under that provision of the statute. We have carefully considered Kimberly-Clark's remaining arguments, but find them unpersuasive.

[5] While Kimberly-Clark cites cases such as *Prater* , *Conley* , and *In re Cormany* , 476 F.2d

998, 177 USPQ 450 (CCPA 1973), for the proposition that inventor testimony obtained in the context of litigation can be used to invalidate a claim, as we have explained above, those cases address the use of inventor testimony in the context of *patent prosecution* . As for the district court cases cited by Kimberly-Clark, *see Bontrager v. Steury Corp.* , 457 F.Supp. 526, 201 USPQ 813 (N.D. Ind. 1978); *Inpro, Inc. v. A.W. Chesterton Co.* , 657 F.Supp. 935, 2 USPQ2d 1597 (N.D. Ill. 1987), they are not binding on us and are not persuasive.

## C. *Invalidity under Section 102(f)*

Kimberly-Clark alternatively argues that the district court's judgment of invalidity should be *affirmed* because, contrary to that court's conclusion, the claims are also invalid under section 102(f); it asserts that someone other than Solomon must have conceived the invention claimed by the '381 patent. Kimberly-Clark contends that the claims require a depression formed from material having two different thicknesses, but the panty Solomon invented, as revealed by her deposition testimony and the DX13 prototype, did not contain such a depression. Kimberly-Clark notes that while Solomon argues that her approval of the patent application before it was filed and her oath of inventorship prove that she was the true inventor, her deposition testimony shows that she did not understand the application that her lawyer filed on her behalf. Lastly, while Kimberly-Clark acknowledges that it was unable to name the "true" inventor, it contends that section 102(f) only requires that the accused infringer prove by clear and convincing evidence that the alleged patentee is not the true inventor, which it has done.

Solomon responds that the district court correctly held that the claims were not invalid under section 102(f). Solomon argues that Kimberly-Clark failed to prove invalidity by clear and convincing evidence, because Kimberly-Clark failed to prove the identity of the true inventor, and Solomon's allegedly inconsistent testimony was insufficient to invalidate the '381 patent. In any event, Solomon argues that she never testified that she was not the true inventor, and she notes that she actively assisted her patent attorney prepare her application and signed the oath of inventorship. While Solomon concedes that the DX13 prototype does in fact contain a depression region of uniform thickness, she points out that that prototype was one of several, and that another prototype, the DX2 prototype, contains a depression formed by material having two different thicknesses. Moreover, Solomon argues that her testimony and the prototypes are consistent with her contention from the beginning of this litigation that the patent claims cover both panties with a depression made of material having two different thicknesses and panties with a depression made of material of uniform thickness.

Section 102(f) provides that " [a] person shall be entitled to a patent unless--he did not himself invent the subject matter sought to be patented. . . ." 35 U.S.C. Section 102(f) (1994). Chisum explains that section 102(f)

> bars issuance of a valid patent to a person or persons who derive the conception of the invention from any other source or person. A corollary of this requirement is the rule of proper joinder of inventors. The rule operates both as to misjoinder (erroneous addition of a person who is not in fact a joint inventor) and as to nonjoinder (failure to add a joint inventor). Potentially, misjoinder and nonjoinder are as fatal to the validity of a patent (or the effectiveness of a filed application) as a case of complete inventorship error.

1 Chisum, *supra* , Section 2.03, at 2-40 & nn.1-2. If failure to comply with section 102(f) is proven by clear and convincing evidence, the claims of a patent will be held invalid. *See Pannu v. Iolab Corp.* , 155 F.3d 1344, 1349, 47 USPQ2d 1657, 1661 (Fed.Cir. 1998) (setting forth this standard in the context of nonjoinder). However, when a party has been misjoined or nonjoined, a patent may be saved from invalidity by operation of 35 U.S.C. Section 256. *See id.* at 1350, 47 USPQ2d at 1662.

[ 2 ] We agree with Solomon that the district court correctly held that Kimberly- Clark failed to prove by clear and convincing evidence that the claims of the '381 patent are invalid under section 102(f). Although we understand Kimberly-Clark to contend that the claims are invalid under section 102(f) either because Solomon is simply not the true inventor and thus should not be named on the patent, or that someone else (Kimberly-Clark suggests Solomon's patent attorney) invented the claimed invention and should have been joined but was not, both of Kimberly-Clark's assertions fail for the same reason: Kimberly- Clark relied entirely on Solomon's lack of precision in defining her invention in the course of her deposition and the DX13 prototype, rather than introducing clear and convincing evidence that someone else was the true inventor. While an inventor's statements made during the course of litigation might in some circumstances justify a court in concluding that the named inventor "did not himself invent the subject matter sought to be patented," 35 U.S.C. Section 102(f), it would require much stronger evidence that the named inventor was not the true inventor to justify a conclusion of clear and convincing evidence of invalidity. Despite some vagueness and inconsistency in Solomon's deposition testimony, she maintained throughout that she invented the claimed subject matter, and she submitted evidence that the DX2 prototype in her patent attorney's files embodied the claimed invention. Moreover, the DX13 prototype actually supports Solomon's position, as she has consistently maintained from the outset of the litigation that her invention includes panties and panty liners with a depression of uniform thickness. *See Solomon I* , 1998 WL 279346, at *2. In light of that evidence, and in light of the fact that Kimberly-Clark failed to offer any evidence that a different inventor was responsible for the invention, the district court was correct to deny Kimberly-Clark's motion for summary judgment of invalidity under section 102(f).

As for the suggestion that Solomon's attorney might be the true inventor, we regard that argument as misguided. An attorney's professional responsibility is to assist his or her client in defining her invention to obtain, if possible, a valid patent with maximum coverage. An attorney performing that role should not be a competitor of the client, asserting inventorship as a result of representing his client. *Cf.* Patent and Trademark Office, U.S. Dep't of Commerce, *Manual of Patent Examining Procedure* app. R Section 10.64 (7th ed.1998) ("Avoiding acquisition of interest in litigation or proceeding before the [Patent and Trademark] Office"). Thus, to assert that proper performance of the attorney's role is a ground for invalidating the patent constitutes a failure to understand the proper role of a patent attorney. Accordingly, we conclude that the district court did not err in rejecting Kimberly-Clark's section 102(f) invalidity defense. We therefore need not assess the remaining evidence presented by Kimberly-Clark, or reach the parties' arguments relating to 35 U.S.C. Section 256.

## CONCLUSION

The district court correctly concluded that Kimberly-Clark failed to prove that the claims of the '381 patent are invalid under section 102(f). However, the court erred in invalidating those claims under section 112, paragraph 2. We therefore *REVERSE* .

- End of Case -

---

Top

Contact customer relations at: customercare@bna.com or 1-800-372-1033

ISSN 1526-8535

A practitioner ... confidences and secrets of a client.

§10.57 Preservation of confidences and secrets of a client.

(a) "Confidence" refers to information protected by the attorney-client or agent-client privilege under applicable law. "Secret" refers to other information gained in the professional relationship that the client has requested be held inviolate or the disclosure of which would be embarrassing or would be likely to be detrimental to the client.

(b) Except when permitted under paragraph (c) of this section, a practitioner shall not knowingly:

(1) Reveal a confidence or secret of a client.

(2) Use a confidence or secret of a client to the disadvantage of the client.

(3) Use a confidence or secret of a client for the advantage of the practitioner or of a third person, unless the client consents after full disclosure.

(c) A practitioner may reveal:

(1) Confidences or secrets with the consent of the client affected but only after a full disclosure to the client.

(2) Confidences or secrets when permitted under Disciplinary Rules or required by law or court order.

(3) The intention of a client to commit a crime and the information necessary to prevent the crime.

(4) Confidences or secrets necessary to establish or collect the practitioner's fee or to defend the practitioner or the practitioner's employees or associates against an accusation of wrongful conduct.

(d) A practitioner shall exercise reasonable care to prevent the practitioner's employees, associates, and others whose services are utilized by the practitioner from disclosing or using confidences or secrets of a client, except that a practitioner may reveal the intention of his client to commit a crime and the information necessary to prevent the crime.

(e) The duty to preserve confidences and secrets of a client under this Disciplinary Rule terminates upon the death of the client.

§10.58 Declining or withdrawing from employment.

(a) Except as stated in paragraph (c), a practitioner shall not accept employment on behalf of a person if the practitioner knows or it is obvious that the person wants to accomplish a result which would violate these Rules or the law.

(b) A practitioner shall not accept employment in a matter if the practitioner knows or it is obvious that the practitioner will be called as a witness on a significant issue on behalf of the client, and that it is undesirable for the practitioner to act as both advocate and witness.

(c) A practitioner may undertake employment and the practitioner or another practitioner in the practitioner's firm may testify:

(1) If the testimony will relate solely to an uncontested matter.

(2) If the testimony will relate solely to a matter of formality and there is no reason to believe that substantial evidence will be offered in opposition to the testimony.

(3) If the testimony will relate solely to the nature and value of legal services rendered in the case by the practitioner or the practitioner's firm to the client.

(4) As to any matter, if refusal would work a substantial hardship on the client because of the distinctive value of the practitioner or the practitioner's firm as counsel in the particular case.

§10.63 Withdrawal when the practitioner becomes a witness.

(a) If, after undertaking employment in a proceeding in the Office, a practitioner learns or it is obvious that the practitioner or another practitioner in the practitioner's firm ought to sign an affidavit to be filed in the Office or be called as a witness in a proceeding before the Office, a practitioner learns or it is obvious that the practitioner or another practitioner in the practitioner's firm may be asked to sign an affidavit to be filed in the Office or be called as a witness other than on behalf of the practitioner's client, the practitioner may continue the representation until it is apparent that the practitioner's affidavit or testimony is or may be prejudicial to the practitioner's client.

§10.64 Avoiding acquisition of interest in litigation or proceeding before the Office.

(a) A practitioner shall not acquire a proprietary interest in the subject matter of a proceeding before the Office which the practitioner is conducting for a client, except that the practitioner may:

(1) Acquire a lien granted by law to secure the practitioner's fee or expense; or

(2) Contract with a client for a reasonable contingent fee; or

(3) In a patent case, take an interest in the patent as part or all of his or her fee.

(b) While representing a client in connection with a contemplated or pending proceeding before the Office, a practitioner shall not advance or guarantee financial assistance to a client, except that a practitioner may advance or guarantee the expenses of going forward in a proceeding before the Office including fees required by law to be paid to the Office, expenses of investigation, expenses of medical examination, and costs of obtaining and preserving evidence, provided the client remains ultimately liable for such expenses. A practitioner may, however, advance any fee required to prevent or ... ment therein for the protection of th client, unless the client has consente after full disclosure.

§10.66 Refusing to accept or continu employment if the interests of an other client may impair the inde pendent professional judgment o the practitioner.

(a) A practitioner shall decline prof fered employment if the exercise of th practitioner's independent professiona judgment in behalf of a client will be or is likely to be adversely affected by the acceptance of the proffered employment, or if it is would be likely to involve the practitioner in representing differing interests, except to the extent permitted under paragraph (c) of this section.

(b) A practitioner shall not continue multiple employment if the exercise of the practitioner's independent professional judgment in behalf of a client will be or is likely to be adversely affected by the practitioner's representation of another client, or if it would be likely to involve the practitioner in representing differing interests, except to the extent permitted under paragraph (c) of this section.

(c) In the situations covered by paragraphs (a) and (b) of this section a practitioner may represent multiple clients if it is obvious that the practitioner can adequately represent the interest of each and if each consents to the representation after full disclosure of the possible effect of such representation on the exercise of the practitioner's independent professional judgment on behalf of each.

(d) If a practitioner is required to decline employment or to withdraw from employment under a Disciplinary Rule, no partner, or associate, or any other

(9) The court shall not in the exercise of any such declaratory jurisdiction determine a question whether a patent was granted to a person not entitled to be granted the patent if the proceedings in which the jurisdiction is invoked were commenced after the end of the period of two years beginning with the date of the grant of the patent, unless it is shown that any person registered as a proprietor of the patent knew at the time of the grant or, as the case may be, of the transfer of the patent to him that he was not entitled to the patent. [41]

**NOTES**

Sub-s (1): substituted by the Copyright, Designs and Patents Act 1988, s 295, Sch 5, para 9(2).

Sub-ss (4), (7), (8): words in square brackets substituted by the Copyright, Designs and Patents Act 1988, s 295, Sch 5, para 9(3).

**38 Effect of transfer of patent under s 37**

(1) Where an order is made under section 37 above that a patent shall be transferred from any person or persons (the old proprietor or proprietors) to one or more persons (whether or not including an old proprietor), then, except in a case falling within subsection (2) below, any licences or other rights granted or created by the old proprietor or proprietors shall, subject to section 33 above and to the provisions of the order, continue in force and be treated as granted by the person or persons to whom the patent is ordered to be transferred (the new proprietor or proprietors).

(2) Where an order is so made that a patent shall be transferred from the old proprietor or proprietors to one or more persons none of whom was an old proprietor (on the ground that the patent was granted to a person not entitled to be granted the patent), any licences or other rights in or under the patent shall, subject to the provisions of the order and subsection (3) below, lapse on the registration of that person or those persons as the new proprietor or proprietors of the patent.

(3) Where an order is so made that a patent shall be transferred as mentioned in subsection (2) above or that a person other than an old proprietor may make a new application for a patent and before the reference of the question under that section resulting in the making of any such order is registered, the old proprietor or proprietors or a licensee of the patent, acting in good faith, worked the invention in question in the United Kingdom or made effective and serious preparations to do so, the old proprietor or proprietors or the licensee shall, on making a request to the new proprietor or proprietors (or, as the case may be, the new applicant) within the prescribed period, be entitled to be granted a licence (but not an exclusive licence) to continue working or, as the case may be, to work the invention, so far as it is the subject of the new application.

(4) Any such licence shall be granted for a reasonable period and on reasonable terms.

(5) The new proprietor or proprietors of the patent (or, as the case may be, the new applicant) or any person claiming that he is entitled to be granted any such licence may refer to the comptroller the question whether that person is so entitled and whether any such period is or terms are reasonable, and the comptroller shall determine the question and may, if he considers it appropriate, order the grant of such a licence. [42]

**NOTES**

Sub-ss (3), (5): words in square brackets inserted by the Patents Act 2004, s 16(1), Sch 2, paras 1, 10.

*Employees' inventions*

**39 Right to employees' inventions**

(1) Notwithstanding anything in any rule of law, an invention made by an employee shall, as between him and his employer, be taken to belong to his employer for the purposes of this Act and all other purposes if—

(a) it was made in the course of the normal duties of the employee or in the course of duties falling outside his normal duties, but specifically assigned to him, and the circumstances in either case were such that an invention might reasonably be expected to result from the carrying out of his duties; or

(b) the invention was made in the course of the duties of the employee and, at the time

of making the invention, because of the nature of his duties and the particular responsibilities arising from the nature of his duties he had a special obligation to further the interests of the employer's undertaking.

(2) Any other invention made by an employee shall, as between him and his employer, be taken for those purposes to belong to the employee.

[(3) Where by virtue of this section an invention belongs, as between him and his employer, to an employee, nothing done—

(a) by or on behalf of the employee or any person claiming under him for the purposes of pursuing an application for a patent, or

(b) by any person for the purpose of performing or working the invention,

shall be taken to infringe any copyright or design right to which, as between him and his employer, his employee is entitled in any model or document relating to the invention.] [43]

NOTES

Sub-s (3): added by the Copyright, Designs and Patents Act 1988, s 295, Sch 5, para 11(1).

40 Compensation of employees for certain inventions.

[(1) Where it appears to the court or the comptroller on an application made by an employee within the prescribed period that—

(a) the employee has made an invention belonging to the employer for which a patent has been granted,

(b) having regard among other things to the size and nature of the employer's undertaking, the invention or the patent for it (or the combination of both) is of outstanding benefit to the employer, and

(c) by reason of those facts it is just that the employee should be awarded compensation to be paid by the employer,

the court or the comptroller may award him such compensation of an amount determined under section 41 below.]

[(2) Where it appears to the court or the comptroller on an application made by an employee within the prescribed period that—

(a) a patent has been granted for an invention made by and belonging to the employee,

(b) his rights in the invention, or in any patent or application for a patent for the invention, have since the appointed day been assigned to the employer or an exclusive licence under the patent or application has since the appointed day been granted to the employer,

(c) the benefit derived by the employee from the contract of assignment, assignation or grant or any ancillary contract ("the relevant contract") is inadequate in relation to the benefit derived by the employer from [the invention or the patent for it (or both)]; and

(d) by reason of those facts it is just that the employee should be awarded compensation to be paid by the employer in addition to the benefit derived from the relevant contract,

the court or the comptroller may award him such compensation of an amount determined under section 41 below.

(3) Subsections (1) and (2) above shall not apply to the invention of an employee where a relevant collective agreement provides for the payment of compensation in respect of inventions of the same description as that invention to employees of the same description as that employee.

(4) In subsection (2) above "shall have effect notwithstanding anything in the relevant contract or any agreement applicable to the invention (other than any such collective agreement).

(5) If it appears to the comptroller on an application under this section that application involves matters which would more properly be determined by the court, he may decline to deal with it.

(6) In this section—

NORWICH RESEARCH PARK
COLNEY LANE
NORWICH
NORFOLK NR4 7UH
ENGLAND

TEL: +44 (0)1603 456500
FAX: +44 (0)1603 456552

PBL PLANT BIOSCIENCE LIMITED

EMAIL: ajsc@Plantbioscience.com
OUR REF: 98/ajsc/Scott

7 December 1998

Lionel Scott
95 Norwich Road
Wymondham
Norfolk
NR18 0SJ

Dear Lionel

The six month probationary period under the terms of your contract with PBL was completed on 13 October. I am pleased to confirm that, following your hard work and the commitment shown during this period, your contract will be extended beyond its original expiry date of March 1999.

From 1 April 1999 your employment contract will be open-ended with a notice period of not less than three months, given in writing, of termination by either yourself or the Company. All other terms and conditions of employment will remain the same as in your existing contract.

Thank you for your continued commitment and service to Plant Bioscience Limited.

Yours sincerely

Jan Chojecki
Managing Director

STATEMENT OF TERMS AND CONDITIONS OF EMPLOYMENT for

**LIONEL SCOTT of 28 View Park Drive, Burnside, Glasgow G73 3QD with JOHN INNES CENTRE INNOVATIONS LIMITED of Norwich Research Park, Colney Lane, Norwich NR4 7UH.**

## 1. Date of Commencement and Duration

Your employment with John Innes Centre Innovations Limited (the "Company") will commence on ~~11th May~~ 14th April 1998 and will terminate on 31st March 1999.

Your employment is offered for a fixed term only. It is a condition of your employment that you agree not to make a claim for redundancy or unfair dismissal when this contract expires. Your period of continuous employment will commence on 11th May 1998 and does not include any service with a previous employer.

## 2. Appointment

The Company shall employ you and you agree to act as the Intellectual Property Manager of the Company on and subject to the terms and conditions specified herein. You will report to the Managing Director of the Company.

## 3. Scope of the Employment

You shall be employed as Intellectual Property Manager and a description of the Working Guidelines of the Company and your Duties in relation thereto are set out in Schedules 1 and 2 of this Agreement. In this position you shall:

(a) devote the whole of your time, attention and skill to your duties;

(b) faithfully and diligently perform such duties and exercise such powers consistent with your position as may from time to time be assigned to or vested in you by the Company;

(c) obey the reasonable and lawful directions of the Company;

(d) comply with all the Company's rules, regulations, policies and procedures from time to time in force; and

(e) keep the Company at all times promptly and fully informed (in writing if so requested) of your conduct of the business of the Company and provide such explanations in connection therewith as the Managing Director may require.

## 4. Salary

(a) You shall receive an annual salary at £... or at such higher rate as may be notified to you by the Company. Your salary will be paid monthly in arrears by credit transfer and with each payment you will receive a written statement showing gross pay, deductions and net pay.

(b) You shall at the discretion of the Company, be eligible for an annual personal performance related bonus payment of pro rata for the period ending 31 March 1999. Payment of a bonus will be conditional upon you achieving certain annual results determined by the Company. Your personal performance objectives and the basis for bonus award assessment, are set out in Schedule 3 to this agreement. These objectives will be reviewed in the event of significant change or re-organisation of the Company.

(c) In addition you shall at the discretion of the Company, be eligible for an annual Company performance related bonus payment of £ pro rata or at such higher rate as may be notified to you by the Company. Payment of the Company performance bonus will be conditional upon the Company achieving certain annual business results targets determined by the Board. These objectives will be reviewed in the event of significant change or re-organisation of the Company.

(d) Your salary and bonus conditions will be reviewed annually at the end of the Company's accounting year or earlier at the discretion of the Company, and in any case in the event of significant change or re-organisation of the Company.

## 5. Deductions

For the purposes of the Wages Act 1986, you hereby authorize the Company to deduct from your remuneration hereunder any sums due from you to the Company including, without limitation, any over-payments, loans or advances made to you by the Company, the cost of repairing any damage or loss to the Company's property caused by you and any losses suffered by the Company as a result of any negligence or breach of duty by you.

## 6. Probation

You will be required to serve an initial period of up to six months during which time your performance and potential will be assessed. If at any time during this probationary period it is considered that your performance or conduct are unsatisfactory, your employment may be terminated by giving you one month's notice. On completion of this period to the satisfaction of the Company, your appointment will be formally confirmed in writing.

## 7. Holidays

You will be entitled to all bank and other UK public holidays and in addition to 25 working days holiday. On the commencement and termination of your employment, you will be treated as having accrued holiday on a pro rata basis for each complete month of service in that calendar year calculated by reference to your first or last day at work (as appropriate). If, on the termination of your employment, you have exceeded your accrued holiday entitlement, this excess will be deducted from your final salary payment. If you have holiday entitlement still owing the Company may, at its sole discretion, require you to take your holiday during your notice period or pay you a sum in lieu of accrued holiday.

Holiday entitlement for one calendar year should normally be taken in the same calendar year, unless otherwise agreed with the Managing Director.

## 8. Hours of Work

Your normal hours of work will be 42 hours per week. All employees of the Company are expected to be reasonably flexible in meeting work commitments which fall outside these normal hours. There is no provision for paid overtime.

## 9. Sick Pay

If you are unable to work for any reason, you must notify your office as early as possible on the first day of during your absence, giving details of the reasons for, and the anticipated length of absence.

On your return, if your absence was for less than seven days (including Saturday and Sunday), you should complete a self-certificated form available from the Personnel Department of the John Innes Centre and return it to your office. Any absence of more than seven days (including nonworking days) should be supported by a doctor's certificate which should be handed to your office when you return.

You will not normally be paid for self-certificated sickness in excess of 10 days in any year. Annual leave entitlement will not be accrued during sick leave where this exceeds 10 days in any year.

Once your appointment has been confirmed you will be eligible to receive sick pay pro rata up to a maximum of 20 days in any one year and thereafter to receive 65% of your last earnings up to a maximum of three months.

You will be paid by the Company who will claim your entitlement to Statutory Sick Pay. Payments depend on following these rules.

## 10. Other Benefits

The Company will provide for a personal income replacement insurance with which will provide you up to 65% of your last earnings in case you suffer a happening that will result de facto in your disqualification or disablement in accordance with the insurance policy taken out by the Company.

Furthermore the Company will make a maximum contribution of up to £6,000 on a costs-made basis towards your house sale/purchase and removal expenses, including accommodation costs in Norwich until you complete the purchase of accommodation in the Norwich area or 31 March 1999 whichever is the earlier date.

For avoidance of any doubt, acceptable expenses include all legal expenses relating to the sale/purchase, survey fees, removal and storage, estate agents fees on house sale, and reasonable refurbishment such as carpets and curtains provided that the Company's contribution to said refurbishment shall not exceed £1,500.

## 11. Termination and Notice

11.1 Once your appointment has been confirmed both you and the Company must give not less than three calendar month's written notice of termination unless previously terminated in accordance with clause 11.2.

11.2 Your employment shall be subject to termination by the Company by summary notice in writing if you shall have:

(a) committed any serious breach or repeated or continued (after warning) any material breach of your obligations hereunder; or

(b) been guilty of conduct tending to bring yourself or the Company into disrepute; or

(c) become bankrupt or have an interim order made against you under the Insolvency Act 1986 or compounded with your creditors generally; or

(d) failed to perform your duties to a satisfactory standard, after having received a written warning from the Company relating to the same.

Any delay by the Company in exercising such right of termination shall not constitute a waiver thereof.

11.3 If the Company becomes entitled to terminate your appointment hereunder pursuant to Clause 11.2, it shall be entitled (but without prejudice to its rights subsequently to terminate such employment on the same or any other grounds) to suspend you on full pay for so long as it may think fit.

11.4 The Company reserves the right to pay you salary in lieu of any period of notice which it or you are required to give. On termination of your employment you shall return to the Company all property in your possession or control which belongs or relates to it.

11.5 During any period of notice of termination (whether given by the Company or you), the Company shall be under no obligation to assign any duties to you and shall be entitled to exclude you from its premises, providing that this shall not affect your entitlement to receive normal salary and other contractual benefits.

## 12. Grievance

If you are unhappy about any aspect of your employment you should raise it orally with the Managing Director in first instance.

## 13. Expenses

You will be reimbursed all reasonable expenses properly incurred by you in the performance of your Duties on the production of appropriate receipts or other satisfactory documentation and in accordance with the Company's rules and guidelines.

## 14. Health and Safety

You will be subject to and required to observe any Safety Rules instituted by the Company or applicable to the Company's premises under any lease agreement for the time being in force and any amendments thereto. A copy of the current Safety Rules is available from the John Innes Centre Personnel Department.

## 15. Discipline

You shall be subject to such disciplinary procedures as the Company may determine from time to time.

## 16. Pension

The Company will provide an annual contribution of 10% pro rata towards an agreed personal pension scheme of your choice unless the Company shall determine an increase in contribution is merited.

## 17. Place of Work and Residence

Your place of work will be at Hill House, Colney Lane, Norwich NR4 7UH but the Company may require you to work at any place within the UK on either a temporary or an indefinite basis. You will be given reasonable notice of any change in your place of work. You will be expected to live within reasonable daily travelling distance of your place of work. You shall also if called upon to do so and without any further remuneration therefore than is herein mentioned, travel elsewhere in the United Kingdom and abroad to perform properly your duties hereunder, save that in the normal course of business it is not envisaged that any continuous periods abroad will exceed one month.

## 18. Confidential Information

You shall not, except as authorised or required by your Duties, use for your own benefit or gain or reveal to any person(s), firm, company or other organisation whatsoever, any Discoveries or Confidential Information directly or indirectly originating in the John Innes Centre laboratories which may come to your knowledge during your employment. This restriction shall continue to apply after the termination of your employment without limitation in time, but shall cease to apply to any information or knowledge which may subsequently come into the public domain, other than by way of unauthorised disclosure. "Confidential Information" shall include, but not be limited to information or data howsoever recorded or stored relating to the research, Discoveries, business, specifications, results, reports, tests and test results, know-how, inventions or improvements or other matters directly or indirectly resulting from the research or business activities of the John Innes Centre laboratories and/or the Company, or documents or other information to which you may have access which have been passed to you under an express or implied obligation of confidence.



2 6

## 19. Discoveries

In this Agreement "Discovery" shall mean any invention, system, discovery, information results of research, formula, method, process, know-how, improvement in design or procedure, drawing, design or photograph insafar they are directly or indirectly resulting from the research or business activities of the Company and/or all Institutional laboratories that the Company serves or has dealings with whether or not capable of patent, copyright, trademark or other protection in the United Kingdom or overseas.

You shall disclose to the Board full details of any Discovery you conceive, make or improve on your own or with others where such Discovery:

(a) is made in the course of or is suggested by your Duties; or

(b) is connected with any of John Innes Centre laboratories, research or businesses and/or that of the Company; or

(c) is made after employment partially or wholly as a result of knowledge gained during employment, directly or indirectly, resulting from the research or business activities of the John Innes Centre laboratories.

You agree that if a Discovery belongs to you pursuant to Section 39 of the Patents Act 1977, you will immediately disclose it to the Company and to no one else and will if the Company requests within 90 days assign your rights in that Discovery to the Company. You agree you shall not, until the Company notifies you that it does not wish to take an assignment of the rights in the Discovery, disclose the Discovery, apply for any protection for it, or exploit it for any person's gain, and that you will during that period treat the Discovery as confidential.

You agree that where the Discovery belongs to the Company you will, both during and after your employment:

(a) treat all information connected with the Discovery as confidential pursuant to Clause 18 and will not, without the Company's prior written consent, disclose it or exploit it for any person's gain;

(b) provide full explanations, specifications and drawings of the Discovery;

(c) reasonably cooperate with the Company at its expense in order to vest full right, title and interest in the Discovery in the Company or as it may direct as sole legal and beneficial owner;

(d) reasonably cooperate with the Company at its expense in order to secure and maintain patent, copyright, design, trademark or any other protection for the Discovery in any country.

## 20. Copyright

Copyright in all material which you prepare in the normal course of your Duties and which are relating to any Confidential Information or Discoveries and connected to any of the research and business of the laboratories that the Company services or that of the Company shall belong exclusively to the Company.

## 21. Exclusivity of Service

You are required to devote your full time, attention and abilities to your Duties during working hours and to ensure that your other activities do not conflict with the interests of John Innes Centre laboratories and/or of the Company. You must not, without the written consent of the Company, be in any way directly or indirectly actively engaged or concerned in any other business or activity where this is (or is likely to be) in conflict with the interests of the Company or of the Institutional laboratories which the Company serves or has dealings with or where it adversely affects the proper performance of your Duties.

## 22. Collective Agreements

There are no collective agreements which govern your employment.

## 23. Acceptance

If the offer of appointment is accepted, one copy of these terms and conditions should be signed by you and returned to the undersigned at the address heading the accompanying letter. The other copy is for retention by you.

Signature on behalf of the employer

Date: 5 February '98

## 24. Employee's Acceptance

I accept the appointment on the terms and conditions set out or referred to above.

Signature of employee

Date: 11th February, 1998

## SCHEDULE 1

### Job Description

The Intellectual Property Manager ("IP Manager") will have responsibility primarily for all aspects of day-to-day management of the Company's intellectual property portfolio with respect to filing, prosecution and defence and enforcement of rights in Intellectual Property ("IP") adopted by the Company. The IP Manager will be accountable to and report to the Managing Director. The IP Manager will develop close contacts with scientists at academic organisations served by the Company and patent counsels and organisations licensed by the Company. He will also advise the Company's Management to determine Company policy in relation to managing and exploiting its IP portfolio.

**1. Identification and Protection of Intellectual Property**

The IP Manager will:

(a) instruct and liaise between external patent agents and the inventor-scientists for the purpose of filing, prosecuting, maintaining and defending the IP rights adopted by the Company.

(b) in so far as his/her professional qualifications and internal resources permit, act on behalf of the Company in the filing, prosecution and maintenance of IP rights adopted by the Company;

(c) develop close working relationships with the scientists and others working at the research institutions that the Company serves or has dealings with to facilitate the offering to the Company of the results of research done at the Centre;

(d) identify intellectual property rights arising out of the work done at the research institutions that the Company serves or has dealings with, which may be capable of adoption, protection and commercial exploitation;

(e) take all reasonable steps to secure rights in and to maintain the best possible protection of intellectual property adopted by the Company .

**2. Development and Implementation of Company IP Policy**

The IP Manager will :

(a) advise Managing Director on aspects relating to quality, scope, cost and balance of Company's IP portfolio;

(b) recommend, obtain approval for and have responsibility for the working budget in respect of the Company's external expenditures on IP management ;

(c) develop and maintain familiarity with biotechnological developments, IP law and policy developments at patent offices; and

(d) maintain awareness and advise Company on IP developments which compete with or otherwise have a bearing on Company's own IP portfolio.

(e) establish and maintain Company records of relevant third-party IP and IP-related literature.

**3. Marketing and Licensing activities**

The IP Manager will :

(a) establish and maintain a computerised Company IP database including an appropriate docket system containing information on the prosecution status of Company and relevant third party IP; and

(b) advise and assist Managing Director and Licensing Executive with respect to specific features of Company's IP as may be required for marketing and licensing.

**4. Marketing the Company to Academic Institutions**

The IP Manager will :

(a) market the Company's profile and services to UK and international research institutions capable of providing high quality protectable and valuable IP for commercialisation through the Company's activities;

(b) source, in cooperation with the Managing Director, and conclude IPR Agreements with different UK academic organisations to allow the Company to act on a case-by-case basis as technologies are identified;

(c) seek, for the Company's benefit, to increase the level of awareness and understanding of IP issues among scientists (and administrators) at the research institutions that the Company serves or has dealings with. Issues to address shall include *inter alia* (a) best lab practice for managing IP (b) what constitutes disclosure/anticipation (c) identifying protectable IP prior to disclosure (d) process for protection of IP and follow-up research (e) IP policy and third party sponsorship issues;

(d) the IP Manager will be responsible for recommending and implementing the most cost-effective route, from the Company's perspective, to achieve this, whether through a programme of oral "education" or written advice or both. The Intellectual Property Manager will at all times in this process exercise due sensitivity to the Company's basic "mutually voluntary" relationship with such academic institutions; and

(e) review and revise the Company's standard correspondence used for dealing with routine communications with inventor-scientists on disclosure, registration, defence and enforcement of IP.

**5. Sponsored Research Contracts**

The IP Manager will be responsible for, from time to time, negotiating sponsored research contracts, in line with Company/Institute IP policy, involving sponsorship from industry for research at the research institutions that the Company serves or has dealings with. The IP Manager will seek advice of the Company's legal counsel in the preparation of such contracts. Any contracts will require approval by the Managing Director prior to execution.

## SCHEDULE 2

### Working Guidelines

1. The principal objective of John Innes Centre Innovations Limited ("the Company") is to bring the results of research conducted at the John Innes Centre and the Sainsbury Laboratory into public use for public benefit through commercial exploitation.

2. The Company will operate as an independent fully commercial entity providing such services to the management and scientists of the JIC Institutes required to fulfil its mission.

3. The Company's services will be provided only to those researchers who freely elect to use them. The Company shall not be obliged to accept commissions from researchers where, in the judgement of the Company's management, to do so would not serve the Company's mission or its commercial objectives.

4. In order to achieve it's aims the company will actively identify, protect, market and license intellectual and other properties and services arising from the activities of the JIC Institutes and the Institute's scientists

5. The Company's activities will be conducted so as to achieve it's mission without compromising (A) the long-term sustainability of its activities and viability of the company, (B) the stated missions of the JIC Institutes which it serves, and (C) the interests of the scientists working at the JIC Institutes.

### NOTES:

The phrase "into public use for public benefit" is understood to mean that the Company will enact such strategies to exploit the results of research which will make the fruits of the research as soon as possible available to the general public for its benefit. The public's benefit is understood to be served best by exploiting the research results in such a way that they will become available in the form of Licensed Products for consumption by the general public in the shortest possible time. In such cases where the interest of the general public and those of a certain sub-group of the public such as, for example, companies, growers, or a certain group of consumers conflict or are likely to conflict with each other the Company will give priority to the interest of the general public. Where reasonable and feasible, the Company will require that UK customers and consumers will not be offered less advantageous terms and conditions as compared to the most favourable terms and conditions offered to any customer or consumer in any market outside the UK.

The phrase "fully commercial" is understood to imply that the company will operate as a for-profit entity, *i.e.* it strives to break even as soon as possible and thereafter to maximise long-term profit. The Company will not elect to conclude deals it believes will sacrifice net present value of intellectual property derived from the research of the Institutes in favour of early cash flow, unless its financial position will require it to do so and other possibilities to secure additional funding have been examined. Furthermore it is understood to mean that UK customers, e.g. company's and growers, or consumers will not be given any form of preferential treatment or competitive advantage as compared to non-UK customers and consumers, unless doing so makes good commercial sense. It is recognised that the Company's mission and the commercial nature of its operations may sometimes conflict. In

such cases the Company's for-profit objective will be subject to its mission provided that the Company will not undertake activities which (A) could threaten its long term viability or (B) are not likely to generate sufficient revenues to the Company to cover the direct and indirect costs thereof.

The phrase "Active marketing and licensing" is to be understood to entail, incidentally, marketing and licensing to those UK enterprises which may present the best vehicles for the effective exploitation of John Innes Centre research findings. In this context UK enterprises are understood to be companies registered and operating in the UK or registered elsewhere but with substantial research, development, manufacturing or production operations in the UK. The Company recognises the sensitivity of granting exclusive licenses to technology developed by the Institutes with the financial support of UK public or charitable sources to non-UK companies. Therefore the Company's marketing activities will be conducted in such a way that UK customers, if identifiable, will be given a reasonable opportunity to exploit discoveries made at the Institutes provided that they are willing to do so vigorously and on competitive terms at the moment such opportunity is offered to them.

September 1994

SCHEDULE 3

Personal Performance Objectives

In the period 11th May 1998 to 31 March 1999 your objectives against which your entitlement to the bonus will be measured are as follows:

1. In respect of all new and existing technologies adopted by the Company, implement the timely filing of patent applications, and the registration and prosecution of intellectual property rights in line with policy agreed with Company management and, where appropriate, with licensees or option-holders (this objective shall also incorporate the establishment of a suitable computer based company intellectual property docket system);

2. Assess all technologies as may be offered to the Company and advise management for the potential for registration for intellectual property rights, and competitive intellectual property situation (state of the arts/patent searches);

3. Manage the Company's out-of-pocket intellectual property expenditures within budget allocated for 1998/9;

4. Complete an audit of as yet uninvestigated intellectual property of potential commercial value at the John Innes Centre and Sainsbury Laboratory, reaching at least all group leaders;

5. Identify and secure adoption of at least three new separate technologies from UK academic institutions, excluding the John Innes Centre and Sainsbury Laboratory, being likely patentable and of sufficient commercial potential to be of interest to the Company;

6. Market the Company's services to UK and international research institutions and facilitate the Company executing at least two additional agreements for the licensing of intellectual property rights from such institutions.

Upon satisfactory completion (in the opinion of the Company) of item 1 you will be entitled to 25% of the maximum personal bonus payable to you.

Satisfactory completion (in the opinion of the Company) of items 2, 4 and 6 will each earn a further 10% of the maximum personal bonus payable.

Satisfactory completion (in the opinion of the Company) of item 3 will entitle you to a further 25% of the maximum bonus payable.

Satisfactory completion (in the opinion of the Company) of item 5 will entitle you to a further 20% of the maximum bonus payable.

**Exhibit 4**

**Sarda, Germaine S.**

**From:** Sarda, Germaine S.
**Sent:** Friday, March 07, 2008 3:39 PM
**To:** 'lionelscott@btinternet.com'
**Cc:** 'Gerard Bencen'; Murashige, Kate H.
**Subject:** Our Reference: 61629-20001.30

**Attachments:** Document.pdf

Document.pdf (391 KB)

Re: Inventorship Issues Raised
Our Reference: 61629-20001.30

Dear Dr. Scott,

Attached please find a letter from Kate Murashige for the above-referenced matter.

Please let me know if I may be of further assistance to you.

Best regards,

Germaine Sarda
Legal Secretary
Morrison & Foerster LLP
12531 High Bluff Drive, Suite 100
San Diego, CA 92130-2040
Tel (858) 720-7978

MORRISON | FOERSTER

12531 HIGH BLUFF DRIVE
SUITE 100
SAN DIEGO, CALIFORNIA
92130-2040

TELEPHONE: 858.720.5100
FACSIMILE: 858.720.5125

WWW.MOFO.COM

MORRISON & FOERSTER LLP
NEW YORK, SAN FRANCISCO,
LOS ANGELES, PALO ALTO,
SAN DIEGO, WASHINGTON, D.C.
NORTHERN VIRGINIA,
ORANGE COUNTY, DENVER,
SACRAMENTO, WALNUT CREEK
TOKYO, LONDON, BEIJING,
SHANGHAI, HONG KONG,
SINGAPORE, BRUSSELS

March 5, 2008

Writer's Direct Contact
858.720.5112
KMurashige@mofo.com

Via E-mail: lionelscott@btinternet.com ONLY

Dr. Lionel Scott
Rivercot
Lower Shiplake
Henley on Thames
Oxfordshire
RG9 3NU
England

Re: Inventorship Issues Raised
Our Reference: 61629-20001.30

Dear Dr. Scott:

This is a follow-up letter to the one I sent earlier concerning the above-referenced matter. I wanted to get the appropriate materials to you quickly for your consideration, but I thought it might be helpful to amplify on the conclusion that any contribution you might have made to the invention described in the application filed on behalf of Baulcombe and Hamilton, originally as GB 99/25459 must, in any event, be assigned to PBL.

Section 39 of the Patent Act governs rights to employees inventions. The section concerns two situations under subparagraph (1) and subparagraph (2). Subparagraph (1) relates to your situation; subparagraph (2) relates to whatever does not fit into subparagraph (1).

Subparagraph (1) describes inventions that belong to the employer. The conditions under which this is the case are

(a) that the invention was made in the course of the normal duties of the employee or other assigned duties and where the invention might reasonably be expected to result from carrying out these duties; or

(b) where, at the time of making the invention, the nature of the duties are such that the employee has a special obligation to further the interests of the employer's undertaking.

I did not quote this verbatim, of course, since you have a copy of this section of the statute.

Your situation fits Section 39(1)(1) because what you describe as assertedly your invention in your original letter seems to have arisen in the course of your duties and would reasonably be expected to result therefrom. For example, Schedule 1 attached to your employment agreement states that: among other things, you are supposed to identify intellectual property rights arising out of work done at the research institutions that the company serves or has dealings with which may be capable of adoption, protection and commercial exploitation and take all reasonable steps to secure rights in and maintain best possible protection of intellectual property adopted by the company (Item 1(d) and (e)).

Alternatively, fitting § 39(1)(b), the invention was made in the course of your duties and you had a special obligation to further the interests of the employer's undertaking. That seems to be described by the foregoing as well.

While there is no question in my mind that any invention you might have made in the course of your duties as Patent Manager, regardless of what it is, would be under obligation of assignment to PBL, this does not address the question of whether you would be properly part of the inventive entity with respect to any claims in applications derived from GB 99/25459.

We are, of course, under obligation to assure that the inventorship of any patents to issue from applications based on this original British application is correct. I understand the points that you made in your original letter to me and believe that any contribution you might have made to "scope out" the disclosure of the named inventors, even assuming this to be accurate, would fall within the ordinary responsibilities of a patent professional responsible for obtaining the best possible patent protection.

We would definitely like to resolve this in a non-adversarial way, and request that you objectively consider our position in this matter.

Best regards,

Kate

Kate H. Murashige

KHM:cs
cc: Gerard Bencen M.S., J.D. (via e-mail)

sd-414667